Lesson 5: Standardized Recipes and Preparation Techniques

Introduction

Lesson 5

Standardized Recipes and Preparation Techniques

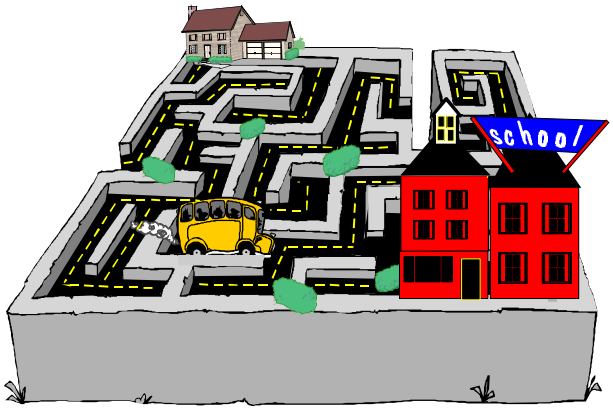
Slide 1

Overview

Your food service operation may just heat prepared food or you may prepare food from "scratch" or a little of both. In any case you will need both standardized recipes and preparation techniques that apply culinary skills to achieve the USDA ***School Meals Initiative for Healthy Children*** nutrition goals. Over the past few years, you may have already learned and applied new culinary skills that increase nutrient retention and reduce fat and saturated fat.

As with all changes, make these changes in recipes and preparation techniques gradually so that over time you can successfully implement healthy culinary skills. Try the ones that will work in your situation and which you think your customers will accept. In doing this, you may achieve a significant difference in the nutrient content of your menus.

Roadmap to Success



Slide 2

Notes

1 Interest Building Strategy/Set

Have T-1 cartoon on screen as lesson opens.
Activity: Gossip

Play "Gossip" to show what can happen to a recipe as it is passed verbally.
Divide the class into groups of five.
Distribute "Gossip" with recipes.
The person with the recipe passes it verbally and secretly to the next person and so on. The last person writes it on a blank overhead transparency sheet.
Someone from each group reports the recipe changes.
Set the Scene: The CNP director just found a great new recipe. She calls her field supervisor into the office to tell her the recipe. The field supervisor calls the manager at the central kitchen to give him the recipe. The manager tells the head cook the new recipe. She repeats it to her assistant who writes it down and then prepares the recipe.

2 Review Competencies

3 Purpose

Our goal is to provide school meals that meet the Healthy School Meals nutritional goals. To help us achieve this goal, we need to standardize our recipes and preparation techniques.
The purpose of this lesson is to learn why standardized recipes must be used in NuMenus and Assisted NuMenus and are essential for good food production.

4 Transfer

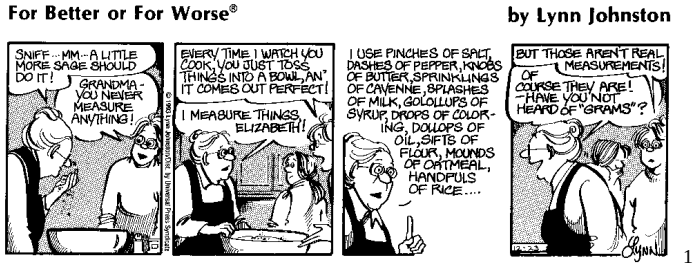
Using standardized recipes is like using a map. First you need to know what your destination is (what the product will be). If you know where you want to end up, then you can find a map (recipe) that will take you there. If you follow the map, or recipe, you can start out with confidence, knowing that you will end up where you intended and not somewhere else.
(Present slide showing map with a school bus heading to a school.)

Standardized Recipes

Standardized recipes are an important part of any well-managed food service program. However, in NuMenus and Assisted NuMenus they are required because they produce an accurate and valid nutrient analysis. In Food Based Menus they are essential to ensure that the planned serving sizes of food items are provided to students.

Definition

A standardized recipe is one that has been tested and adapted for use by a given food service operation and found to produce the same good results and yield every time when the exact procedures are used with the same type of equipment, and the same quantity and quality of ingredients.



[1]

Benefits

Benefits

- Quality control
- Portion and yield control
- Cost control
- Creativity
- Accurate nutrient analysis

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Standardized recipes offer many advantages for school food service. In today's school lunch programs "trial and error" is too risky. Controlling program costs is critical. In addition, students demand high quality foods. Using standardized recipes and avoiding a "pinch of this and a pinch of that" will help put you on the road to success.

Ensure Product Quality

Provide consistently high quality food items that have been thoroughly tested and evaluated.

[1] For Better or Worse © 1993 Lynn Johnston Prod., Inc. Reprinted with permission of Universal Press Syndicate. All rights reserved.

Notes

Show T-2: For Better or For Worse. We hope you will cook with standardized recipes, not like the character, "grams".

Activity – Quiz
Have participants select a partner. Each shares a reason why standardized recipes must be used in NuMenus and are recommended for Food Based Menus.

Know Projected Portions and Yield

Accurately predict the number of portions from each recipe. This will help to eliminate excessive amounts of leftovers and substitutions.

Improve Cost Control

Provide better management of purchasing and storage because standardized recipes specify exact amount of ingredients.

Support Creativity

Using standardized recipes supports creativity in cooking. Employees should be encouraged to continuously improve recipes. As part of recipe development, a recipe should be prepared in smaller quantities for student taste testing, and then tested again in larger quantities to standardize the results. See USDA's ***A Tool Kit For Healthy School Meals***.

Chicken Stir Fry from USDA's
Tool Kit For Healthy School Meals

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Ensure Accuracy

For an accurate nutrient analysis, the changes in a modified recipe must be sent to the menu planner to be added to the local database.

Modifying Recipes for Healthy School Meals

Preparing school meals that are more nutritious means identifying ingredients such as salt, fat, and fiber and then modifying ingredients or changing cooking techniques to reduce the salt and fat, and increase the whole grains in recipes.

Steps to Successful Recipe Modifications

Steps to Successful Recipe Modifications:

- Collect favorite recipes.
- Start by making 25 portions of a recipe.
- Change one ingredient at a time.
- Follow ingredients exactly except those to change.

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Notes

5 Instruction

To encourage participant involvement, suggest guided note taking (80/20 rule). (20% of what we learn we use 80% of the time.) Pick out the 20% of this lesson you will use 80% of the time and make notes about it in the space provided.

- Collect your **customer's favorite** recipes (student surveys and meal participation records can identify favorites): evaluate them to determine which contain a large amount of fat, salt, or are low in fiber. Start with these popular recipes to make the greatest impact on student consumption.
- When you make changes in recipes, start by preparing **25 portions** of a recipe.
- Only change or alter **one ingredient** at a time.
- Follow all ingredients **exactly** except for those you wish to change.

Steps to Successful Recipe Modifications:

- Record clear descriptions.
- Reduce ingredients in increments of 1/4 to 1/2 cup.
- Follow instructions closely and record any changes.
- Instruct food service staff.
- Conduct a student taste test.

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- Record **clear** descriptions of foods substituted in exact amounts.
- If reducing an ingredient, do it in increments of **1/4 to 1/2** cup at a time.
- Follow preparation instructions closely and record changes.
- Instruct food service staff about **how** and **why** recipes have been modified.
- Conduct a student **taste test** for customer acceptance.

Steps to Successful Recipe Modifications:

Characteristics to keep in mind when evaluating:
  – Appearance
  – Consistency or texture
  – Flavor
  – Tenderness
  – Overall acceptability

- No further changes until first modification has produced a high quality product.
- Reproduce at 50 and 100 servings before increasing recipe.

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- Characteristics to keep in mind when evaluating:
  – Appearance
  – Consistency or texture
  – Flavor

Notes

– Tenderness
– Overall acceptability

- Do not make further changes or a larger size recipe until the first modification has produced a high quality product.
- Successfully reproduce at 50 and 100 servings before increasing the recipe to the number needed for your meal service.

Notes

Healthy Food Preparation Techniques

In selecting preparation techniques that will promote healthy school meals you should consider developing culinary skills that incorporate these three principles:

Guiding Principles

- Nutrient retention
- Cooking and storage techniques
- Food service equipment

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Nutrient Retention

Factors Affecting Nutrient Retention

Factors Affecting Nutrient Loss:

- Water
- Heat
- Light
- pH
- Air

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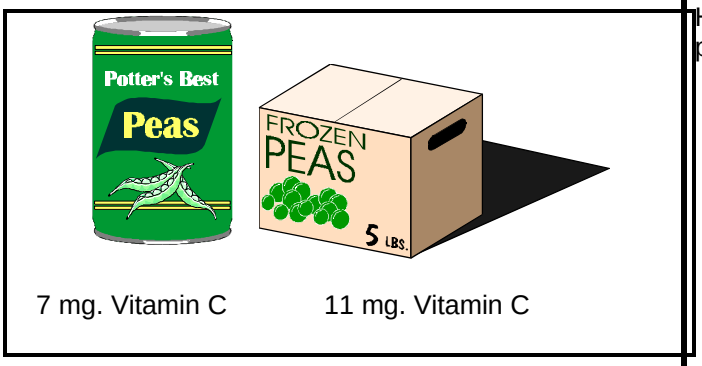
In our effort to offer children nutritious foods it is important to remember that the preparation of foods is just as significant as planning healthy menus. As a food provider, it is important to plan, purchase, prepare and handle foods correctly to prevent nutrient loss. The water-soluble vitamins such as vitamin C and B vitamins are easily destroyed by excess water, air, heat, and acidic foods, while fat-soluble vitamins A, D, E, and K are more stable. No matter how careful you are, food preparation of any kind always destroys some nutrients. Excessive losses, however, can be reduced in the following ways.

Water

Avoid soaking foods in water unless it is absolutely necessary. Soaking food in water can dissolve the vitamins and minerals. If foods must be soaked or remain in water during cooking, try to use the cooking liquid in soup or another product.

Heat



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Heating food causes nutrient loss, especially vitamin C. For example, the vitamin C content of canned peas will differ significantly from cooked, frozen peas. Frozen peas are higher in vitamin C, because heat has destroyed some of the vitamin C in canned peas.

Light

Milk is an excellent source of riboflavin, but if it is allowed to stand open and be exposed to light, considerable destruction of riboflavin can occur. A light obstructing container helps prevent such destruction.

pH

Baking soda should not be added to green vegetables for color retention during cooking since it changes the acid level and results in the destruction of folic acid, thiamin, and vitamin C.

Air

Vitamins A, C, E, K, and the B vitamins thiamin, pyridoxine, biotin, and folic acid are destroyed by oxidation.

To reduce oxidation:

1. Cut vegetables into large pieces so less surface area is exposed to air before cooking them in water.
2. Prepare and chop fresh foods right before cooking or serving, if possible, to avoid nutrient loss.
3. Store foods properly to avoid losses due to improper temperature, light, and air exposure.

Notes

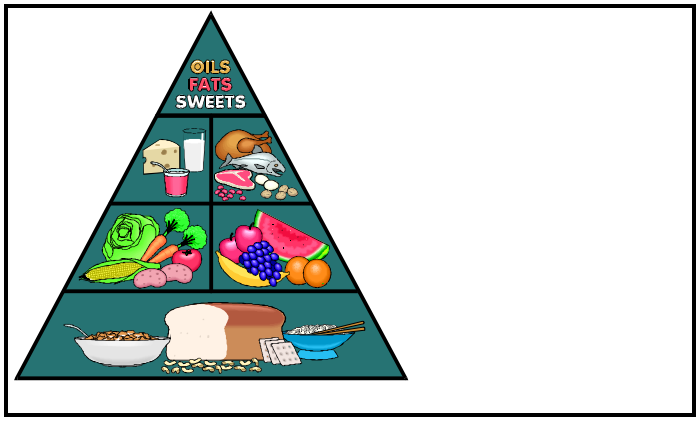
Heat destroys vitamin C in canned peas.

Light destroys riboflavin. Use containers that light cannot penetrate.

Baking soda destroys folic acid, thiamin and vitamin C.

Air contains oxygen, a good thing for us, but oxygen also destroys many vitamins.

Cooking Grains for Nutrient Retention



Slide 11

Health experts encourage Americans to consider grains and breads as the base of a nutritious diet. This is why grains and breads form the base of the USDA Food Guide Pyramid and are its largest component. Whole grain products provide essential nutrients and dietary fiber needed for good health.

Washing and Rinsing

USDA Food Guide Pyramid
Grains and breads are the base for a nutritious meal.

Cooking Grains

- Washing
- Rinsing
- Toasting
- pH

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Never wash rice before cooking. This causes some of the B vitamins and vitamin C to be washed down the drain. Rinsing cooked grains and pastas also causes considerable loss of nutrients, and is not recommended.

Toasting

Browning dry rice before cooking it in water can cause the destruction of half or more of the thiamin content.

Low and High Acid Foods

Pastas and grain should be partially cooked before adding tomato juice or tomato sauce if possible, because the acidic liquid inhibits the pasta or grain from getting completely soft.

Cooking Vegetables for Nutrient Retention

Serving more fruits and vegetables in Child Nutrition Programs is important to the health and well-being of children. Fruits and vegetables are an excellent source of

Notes

Discuss cooking grains for nutrient retention.

Washing and rinsing grains washes B vitamins and vitamin C down the drain. How can you keep pasta from sticking if you don't rinse it?

- sauté
- broth
- oil

vitamins, complex carbohydrates, dietary fiber and other nutrients linked to good health. Advances in food technology make it possible to select fruits and vegetables from many forms, such as fresh, frozen, canned, whole or pre-cut, bulk or preportioned. In any form, fruits and vegetables need to be handled and stored correctly to retain nutrients and improve food safety.

Fresh or frozen vegetables can be cooked by several different methods: adding to a small amount of boiling water, steaming, baking, and sautéing. Regardless of the cooking method used, it is better to prepare small amounts than to cook single large batches. Nutritive value is lost due to long exposure to heat, and quality is lowered. Constant efforts should be made to shorten the time between cooking and serving.

Batch Cooking

Cooking Vegetables: Batch Cooking

- Small quantities
- Minimal water
- Tight-fitting lid
- Cook until just tender

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Vegetables should be cooked in small batches in the least amount of boiling water possible, using a pot with a tight-fitting lid, until just tender to retain the nutrients and bright colors.

This is a culinary method that enhances vegetable quality and improves nutrient retention. The quantity you cook should not exceed the amount that you will be serving on the line within 15 minutes. This is a food quality standard that can only be met by continuous cooking. This cooking method applies to vegetables served alone and vegetables served in recipes such as a beef or a chicken stir-fry. The one exception to this may be root vegetables such as potatoes, carrots, turnips, and beets, etc.

Frozen vegetables should be cooked in small batches from the frozen state in as little water as possible. Bring a small amount of water to a boil before the vegetable is added to reduce the time the vegetable is in the water.

Use cooking liquids including liquids drained off fruits and vegetables wherever possible for soups, gravies, and sauces to recapture many of the lost vitamins.

Notes

This can be a problem with kitchens where no one is available to cook the food during serving time.

Discuss cooking and storage techniques for healthy school meals:
1. baking/roasting
2. steaming
3. microwaving

It is always better to prepare small amounts rather than large ones. Cook food in a small amount of water, just until tender.

Cooking for Healthy School Meals

Notes

Cooking for Healthy School Meals

- Baking
- Steaming
- Microwaving

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You can purchase and properly store the finest and freshest foods available, but they must be cooked correctly to retain nutrients and quality. Culinary methods that strongly support the Dietary Guidelines for Americans are baking or roasting, steaming, and microwaving. When foods are prepared using these methods, they retain more vitamins and minerals, and have less fat.

Baking

Potatoes baked in the skin retain nearly all of their vitamins. A whole baked sweet potato retains 89 percent of the vitamin C. If you cut it in half before cooking, only 31 percent of the vitamin is left when it is cooked. Baking can be used to cook many foods including meats and fish. When no fat is added, baking is a great lowfat cooking method. Baking on a rack or draining the fat after baking helps make foods even lower in fat.

Meats that are roasted (baked uncovered) retain more B vitamins than meats that are braised and stewed. Roasting on a rack allows fat to drain off the meat.

Steaming

Steaming retains more vitamins and minerals does not add fat

Steam cooking is versatile and quick, produces a satisfactory product without added fat, and minimizes nutrient loss. In general, steamed vegetables only lose a third of their vitamin C compared to boiled vegetables, which lose fifty-five percent of the vitamin C.[2] Steaming is another no-fat-added cooking method.

Storage of Value-Added or Fresh-Cut Produce

Discuss value-added produce.

Value-Added Produce

Fresh-cut produce that is ready to use.

Safety is a concern.

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As more school food service programs are purchasing pre-cut fruits and vegetables, it is important to consider food

[2] Jane Brody's Nutrition Book, 1981.

safety and quality issues. Fresh-cut produce is a value-added, ready-to-use fruit or vegetable. These products are becoming very popular in food service as school food authorities are looking for ways to increase the servings of vegetables and fruits without increasing labor costs.

However, the safety aspects of producing and distributing a safe, high quality fresh-cut product is a concern. Contamination from soil, water, processing equipment, handling, exposed cut surfaces and improper temperature controls makes fresh-cut produce a vehicle for disease transmission.

The critical issues are sanitation, temperature control, packaging and distribution.

Critical Issues for Value-Added Produce

- Sanitation
- Temperature
- Date
- Distribution

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Sanitation

Evaluating a supplier of fresh-cut produce is the most critical point. The supplier's ability to keep the processing facility and food handling equipment clean and sanitized is critical in preparing safe, fresh-cut produce. The supplier should have an ongoing food safety and sanitation inspection program.

Temperature Control

The second factor to consider is temperature control. The supplier must continuously keep the product at the coldest optimum temperature possible from the farm to the refrigerated case. If produce is contaminated with food-borne pathogens, proper temperature control will prevent growth of the pathogens. Fresh-cut produce that has been exposed to 40° F or above temperatures for short periods of time will spoil more quickly.

Date

A supplier's code dating and rotation method should be evaluated. A product can be labeled either by "packed on" date or "use by" date coding systems. For food safety reasons, always discard or reject fresh-cut product if the date code is outdated.

Distribution

It is vital to understand how the transit time affects the shelf life and code date. For example, if a product has 14

Notes

Contamination
- soil
- water
- processing equipment
- handling
- exposed surfaces
- improper temperature

Suppliers should have a food safety and sanitation program.

Produce should be kept cold from the time it reaches the processor until service.

Learn your supplier's code dating and check the dates.

6 Guided Practice

Activity: Use the activity sheet in Appendix B for students to identify five culinary skills that apply to nutrient retention. The activity will contain 10 items to choose from. Review

days of shelf life and 10 days of transit time, the product will be delivered to your school with only 4 days of shelf life. It becomes critical to check code dates on delivery and rotate properly on a "first in – first out" basis.

Cooking Equipment for Healthy Meals

The success of food service operations depends greatly on the equipment and staff.

It is important for staff to know what different methods for cooking and preparing food are possible with your existing equipment. As you modify recipes, you may also change the equipment used to prepare items. Instead of cooking the french fries in a deep fat fryer, your new recipe may state: oven-baked french fries.

Selecting the best equipment for food preparation requires understanding of food preparation and the appliance. Your current equipment is probably versatile enough for making the changes necessary to prepare healthy school meals. Ovens, steamers, and skillets allow for cooking methods that require no added fat and thus support the implementation of the Dietary Guidelines for Americans.

Cooking Equipment for Healthy Meals

- Skillets
- Steamers
- Ovens

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Skillets and Sautéing Equipment

Tilting and trunnion skillets

Convenient and fast for braising, frying, sautéing, steaming, boiling, and roasting.

Steam Cooking Equipment

Steam-jacketed kettles

Faster and simpler to control than range-top cooking for soups, stocks, sauces, stews, vegetables, and more. With proper use fewer nutrients are lost due to heat and time.

Pressure steamers

Best for vitamin retention if used properly. Cooks faster than pressureless steamers because as steam pressure rises, so does temperature. Great for batch cooking in high-volume school food service. Both rice and pastas can be cooked in a pressure cooker. Boiling water should be used to start the pasta or rice to speed the cooking time.

Notes

Discuss cooking equipment for healthy meals.

You may want to change your equipment as well as your recipes!

Learn to utilize your current equipment.

Ovens

Convection or conventional

Use for baking, roasting, and broiling, which are lowfat cooking techniques. When fats in meat are heated at high temperatures, this changes the physical properties of fat from a solid to a liquid, so the fat drains away.

Combi ovens

Reheat prepared food without drying, and roasting meats with little shrinkage. It can heat by steam, dry heat, and steam/dry heat.

Microwave ovens

Are becoming more popular and affordable in school food service! When foods are prepared in a microwave oven, they retain more nutrients than foods that are boiled, baked or even steamed. This is especially helpful in batch cooking of vegetables.

Cook/holding cabinet

No food should be held in a warming unit longer than 30 minutes, if you want to serve a quality product and retain nutrients. You will have two problems – an unhappy customer and fewer nutrients!

Culinary Skills to Trim the Fat

It is important to help children learn at a young age the importance of eating a lowfat, low saturated-fat diet. While good eating habits are influenced by the eating patterns of the family, meals presented at school also play a role in the future nutritional well-being of children.

Fat is an important nutrient and sometimes an essential ingredient in cooking. It provides flavor, aroma, and tenderness to food. Fat also helps you feel satisfied after a meal. Most people like the taste of fat in their foods, but too much fat in the diet may result in health problems.

Quick Guide to Fats

Knowing how much fat is in a food is sometimes difficult to determine, but identifying the type of fat, preparation method and ingredients helps. Usually, the amount and type of fat in a recipe can be modified through reducing the amount or using a substitute without affecting quality or acceptability. There are three major types of fat in foods:

Notes

Meals at school play a role in children's future well-being.

Discuss culinary skills to trim the fat and saturated fat.

Fat provides:

- flavor
- aroma
- tenderness

But too much = health problems

How can you tell how much fat is in a food?

Fats

- Saturated
- Monounsaturated
- Polyunsaturated

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Saturated fats are usually solid at room temperature and are of animal origin (butter, cheese, beef and chicken fat) except for palm and coconut oils.

Monounsaturated fats are liquid at room temperature such as olive, peanut and canola oils.

Polyunsaturated fats are usually liquid oils at room temperature and of vegetable origin. Safflower, sunflower, soybean, cottonseed, and corn oils are examples.

Quick guide to fat ingredients (high saturated vs. low saturated)

High Saturated	Low Saturated
Coconut oil	Safflower oil
Palm oil	Corn oil
Cream	Soybean oil
Cocoa butter	Cottonseed oil
Beef fat	Sesame oil
Lard	Canola oil
Poultry fat	Olive oil
Butter	

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Cholesterol

Cholesterol

A fatty alcohol found in animal fats and tissues which is thought to be a factor in atherosclerosis.

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The body requires and makes its own cholesterol. In addition, cholesterol is obtained from food. Animal products are the source of all dietary cholesterol. Meat, poultry, fish, milk, cheese, egg yolk, and organ meats are all major food sources of cholesterol. No plant foods contain cholesterol. Eating less fat from animal sources will help lower serum blood cholesterol as well as lowering the total fat and saturated fat in your diet.

In general, cooking with monounsaturated and polyunsaturated oils are the better choices for lowering

Notes

Saturated fats:
- Solid at room temperature
- Animal origin or tropical oils

Monounsaturated fats:
- Liquid at room temperature

Polyunsaturated fats:
- Vegetable oils
- Usually liquid

Cholesterol is a fat-like substance but is not a fat.

Foods that had a mother contain cholesterol. Those that did not, do not.

saturated fat content. Your first strategy, however, is to decrease the total amount of fat in your menu planning.

Smart Choices in Cooking Lowfat

Methods of preparation such as breading, frying, baking, or the draining of ground beef affect the fat and calorie content of a food.

Make the Smart Choice

High fat
Breading, frying, sautéing

Lowfat
Bake, steam, boil, broil, microwave, drain meats

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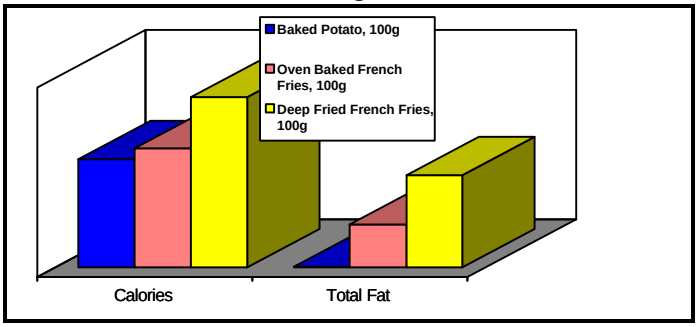
Even though breading, frying, and sautéing use fat in cooking, there are ways to reduce the amount of fat being used or absorbed by applying good culinary skills.

Sautéing/Stir-frying

- To lower the fat, brush the pan with oil just to coat it or use a nonstick spray made from vegetable oil. Two tablespoons of oil used to sauté vegetables will add an extra 240 fat calories; vegetable sprays add less than 10 calories.
- When stir-frying, keep the oil in your kettle very hot. Vegetables soak up cold oil more quickly than hot oil.
- Cut back on buttering vegetables by using one part margarine with one part lemon juice.
- Use a broth or marinade to add flavor and tenderness, without adding fat.
- Learn to use liquids other than oil for moisture:
  – Concentrated fruit juices
  – Fresh fruit and vegetable juices
  – Chicken and meat broth
  – Pureed fruits and vegetables



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Notes

What to do:
Choose more mono and poly fats, while also decreasing total fat.

Deep-Fat Cooking

This is a method that should be used only with a few menu items and infrequently since it increases the fat content of food. The recommended type of fat to use for deep-fat frying is a polyunsaturated vegetable fat such as soybean oil. This type of fat is better for frying because it has a higher smoke point and therefore can be used at a higher termperature so less fat will be absorbed.

There are ways to limit fat absorption. The most important factor is the temperature of the fat. If it is too low, the food must remain in the fat longer to brown properly. The longer the food is in the fat, the more fat will be absorbed. If the temperature is too high, the food browns too quickly and may not be heated enough on the inside to destroy bacteria and to completely cook it.

Tips to Lower Fat
Deep-Fat Cooking

- Pot size
- Correct temperature
- Food quantity
- Reheat between batches
- Dry foods
- Drain foods
- Shake basket

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1. Fill a deep pot or fryer half full with oil. Fat expands when heated and frequently boils up or foams when foods are added. A deep container is important because the smoke point is lower if a large surface of fat is exposed.
2. The fat needs to be heated to the correct temperature for the food being fried, as indicated in Table 4.1. Heat the fat to the highest temperature because when food is added, it cools down the oil, and more fat will be absorbed.
3. Overloading a fryer may drop the temperature to such a point that excessive grease absorption occurs. Follow the product directions for the quantity to fry in a batch.
4. While frying, allow the oil to reheat between batches and ensure that your automatic thermostats are working correctly.
5. Add dry foods to the fryer to prevent spatter and foam.
6. Gently shake the basket of food to remove excess fat before you take the basket away from the fryer.
7. Drain the foods on absorbent paper over racks. Change the paper frequently because fat-soaked

Notes

When you do choose a higher fat cooking method, use good culinary skills to reduce the fat added to your product.

Ways to limit fat absorption:
- Temperature is #1
- Time is #2

Deep containers reduce the surface, which lowers the smoke point.

Allow for recovery time.

Water and oil still don't mix.

Use absorbent paper. Strain out particles.

paper is ineffective in absorbing excess fat from fried food.

8. Strain the fat to remove material in the fat, which lowers its smoke point or temperature.

Table 4.1

Temperature Range (F°)	Foods
350-360	Uncooked chicken, fish, pre-cooked breaded chicken
375-385	Precooked shrimp, croquettes, tempura, fritters
385-395	French-fried potatoes, onion rings
395-400	Potato and tortilla chips

A Little Bit of Sugar

A Little Bit Of Sugar

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Sugar is added to foods because people like the taste! Sugars also serve as preservatives and thickeners. In baked products, sugars contribute to both tenderness and volume. During food processing, sucrose, fruit juice concentrates and corn syrups are added to flavor and preserve foods.

In food preparation and menu planning, our goal is to use sugars in moderation. Sugars and many foods that contain them in large amounts supply calories but are limited in nutrients. The goal should be to select nutrient-dense foods with moderate use of sugar. As a food provider, you can modify a recipe to reduce the sugar or select a purchased product with less added sugar.

A Little Bit of Salt

A Little Bit of Salt

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Sodium is an essential nutrient needed in your diet for good health. Sodium helps regulate body fluids and helps maintain normal blood volume. The average American consumes more sodium than recommended. People like the taste of salt! However, a diet with less salt does not have to be bland or limited in variety. Salt is something you learn to like, and you can "unlearn" your taste for salt. While gradually reducing the amount of salt you eat, you slowly lose your desire for the salt taste.

Notes

6 Guided Practice

Activity: Students will complete the activity sheet in Appendix C. They will write two food preparation methods or ways to reduce the fat content.

7 Individual Practice

None.

8 Closure

Review competencies.

9 Back on the Job...

Training your staff on the culinary skills needed to maximize nutrient retention and minimize added fat is critical to your success in implementing healthy school meals. Your learning and then specifying those same culinary skills in your menu plan is also key.

Review a little bit of sugar and a little bit of salt.

Salt is a food item that can easily be modified, but the change needs to be gradual.

Notes

Appendix A: Activity

Gossip

Recipe 1: Raspberry Dessert Sauce

4 teaspoons sugar
2 teaspoons cornstarch
1/3 cup raspberry-cranberry drink
1 cup fresh raspberries

- Combine sugar, cornstarch and raspberry-cranberry drink in small non-aluminum pan, stirring well.
- Bring to a boil over medium heat, stirring constantly.
- Remove from heat, cool, and stir in raspberries.

Recipe 2: Banana Fana Sauce

3/4 cup ripe banana, sliced
1 teaspoon lemon juice
1 teaspoon honey
1/8 teaspoon nutmeg
8-oz. carton of vanilla lowfat yogurt

- Combine all ingredients in container of an electric blender.
- Cover and process until smooth.
- Cover and chill.
- Serve with fresh strawberries and pineapple chunks.

Recipe 3: Peach-Almond Fizz

1 cup fresh peaches, peeled and sliced
1 cup peach yogurt
1 cup peach nectar
1/2 teaspoon almond extract

- Combine ingredients in container of electric blender.
- Cover and process until smooth.
- Pour 1/2 cup into each of 6 glasses.
- Add 1/4 cup sparkling water to each glass.

Recipe 4: Fruit in Amaretto Syrup

2 cups fresh blueberries
2 cups sliced unpeeled fresh apricots
1/4 cup Amaretto
3 tablespoons white vinegar
2 tablespoons honey

- Combine blueberries and apricots in shallow dish and set aside.
- Combine Amaretto and vinegar in a small saucepan. Bring to a boil over medium heat.
- Remove from heat and stir in honey.
- Pour over fruit, cover and refrigerate.

Recipe 5: Salsa with Chives

1 cup plum tomatoes, diced
1/4 cup fresh chives, chopped
1 teaspoon Dijon mustard
2 cloves garlic, crushed

- Combine all ingredients in a small bowl.
- Stir well.
- Refrigerate.
- Yield is 1 1/4 cups.

Appendix B: Activity

Culinary Skills for Nutrient Retention

Identify the five culinary skills that apply to nutrient retention:

1. Use a small amount of liquid to cook vegetables.
2. Cook a large quantity of vegetables.
3. Rotate and check code dates on value-added items.
4. Brown/toast rice for pilafs.
5. Cook vegetables uncovered.
6. Use batch cooking.
7. Do not add baking soda to vegetables while steaming.
8. Soak vegetables in water to clean.
9. Cut vegetables into large pieces.
10. Overcooked vegetables have more nutrients.

Appendix C: Activity

Culinary Skills to Reduce Fat and Saturated Fat

List two culinary skills that reduce fat and saturated fat.

1.

2.

Appendix D: Instructor Outline

Lesson 5: Standardized Recipes and Preparation Techniques

Lesson Time

Approximately 1 hour

Equipment

- ✔ Slide projector
- ✔ 2 screens
- ✔ Overhead projector

Materials

- ✔ Slides
- ✔ Activity – Appendix A: Gossip
- ✔ Activity – Appendix B: Culinary Skills for Nutrient Retention
- ✔ Activity – Appendix C: Culinary Skills to Reduce Fat and Saturated Fat
- ✔ Transparencies:
  - T-1 Cartoon: Ernie
  - T-2 Cartoon: For Better or for Worse
  - T-3 Activity – Appendix B: Culinary Skills for Nutrient Retention
  - T-4 Activity – Appendix C: Culinary Skills to Reduce Fat and Saturated Fat
- ✔ Blank overhead transparency sheets
- ✔ Transparency pens

Lesson Plan Outline

1. Interest Building Strategy/Set
    a) Have T-1, Ernie cartoon, on screen as lesson opens.
    b) Activity: Play Gossip to show what can happen to a recipe as it is passed verbally.
    c) Instructions
        i) Divide the class into groups of five. Distribute Gossip with recipes.
        ii) The person with the recipe passes it verbally and secretly to the next person and so on. The last person writes it on a blank overhead transparency. Someone from each group reports the recipe changes.
        iii) Set the Scene: The CNP director just found a great new recipe. She calls her field supervisor into the office to tell her the recipe. The field supervisor calls the manager at the central kitchen to give him the recipe. The manager tells the head cook the new recipe. She repeats it to her assistant who writes it down and then prepares the recipe.
2. Review Competencies
3. Purpose
    a) Our goal is to provide school meals that meet the Healthy School Meals nutritional goals. To help us achieve these goals, we need to standardize our recipes and preparation techniques. The purpose of this lesson is to learn why standardized recipes must be used in NuMenus and Assisted NuMenus and are essential for good food production.
4. Transfer
    a) Using standardized recipes is like using a map. First you need to know what your destination is (what the product will be). If you know where you want to end up, then you can find a map (recipe) that will take you there. If you follow the map, or recipe, you can start out with confidence, knowing that you will end up where you intended and not somewhere else. (Present slide showing map with a school bus heading to a school.)
5. Instruction
    a) Guided Note Taking – Write down what is useful and remember the 80/20 rule: 80% of the time we use only 20% of the information given to us.
    b) Discuss the importance of using standardized recipes in NuMenus and Assisted NuMenus and why they are essential for good food production.
    c) Before discussing the benefits of using standardized recipes, ask participants what they think the benefits are. Write these on a blank transparency. Check against Slide 4.
    d) Discuss the benefits of using standardized recipes.
    e) Activity: Quiz – Students find a partner. Everyone share with your partner one reason why you must use standardized recipes for good food production. Review reasons. Were any missed?
    f) Show T-2, For Better or Worse cartoon.
    g) Review Modifying Recipes for Healthy School Meals.
    h) Discuss nutrient retention.
        i) Discuss factors that affect nutrient loss.
            a) water
            b) heat
            c) light
            d) pH
            e) air
        ii) Discuss cooking grains for nutrient retention.
        iii) Discuss cooking vegetables for nutrient retention.
    i) Discuss cooking and storage techniques.
        i) Discuss cooking for healthy school meals
            a) baking
            b) steaming

c) roasting
d) microwaving

ii) Discuss storage in terms of value-added produce.

j) Discuss cooking equipment for healthy meals.

k) Discuss culinary skills to trim the fat.
i) Review quick guide to fats.
ii) Review "Smart Choices" in cooking lowfat.
iii) Activity: On the activity sheet in Appendix C, students will write two food preparation methods that reduce the fat.

l) Review "A Little Bit of Sugar."

m) Review "A Little Bit of Salt."

6. Guided Practice
   a) Use Appendix B: Culinary Skills for Nutrient Retention activity sheet for students to identify five culinary skills that apply to nutrient retention. The activity will contain 10 items to choose from. Review answers with the group.
7. Individual Practice
   a) None.
8. Closure
   a) Review competencies.
9. Back on the Job...
   a) Training your staff on the culinary skills needed to maximize nutrient retention and minimize added fat is critical to your success in implementing healthy school meals. Your learning and then specifying those same culinary skills in your menu plan is also key.
10. Lesson Appendices
    a) Appendix A: Gossip
    b) Appendix B: Culinary Skills for Nutrient Retention
    c) Appendix C: Culinary Skills to Reduce Fat and Saturated Fat
    d) Appendix D: Instructor Outline

Appendix D: Instructor Key

Culinary Skills for Nutrient Retention

Identify the five culinary skills that apply to nutrient retention:

1. **Use a small amount of liquid to cook vegetables.**
2. Cook a large quantity of vegetables.
3. **Rotate and check code dates on value-added items.**
4. Brown/toast rice for pilafs.
5. Cook vegetables uncovered.
6. **Use batch cooking.**
7. **Do not add baking soda to vegetables while steaming.**
8. Soak vegetables in water to clean.
9. **Cut vegetables into large pieces.**
10. Overcooked vegetables have more nutrients.

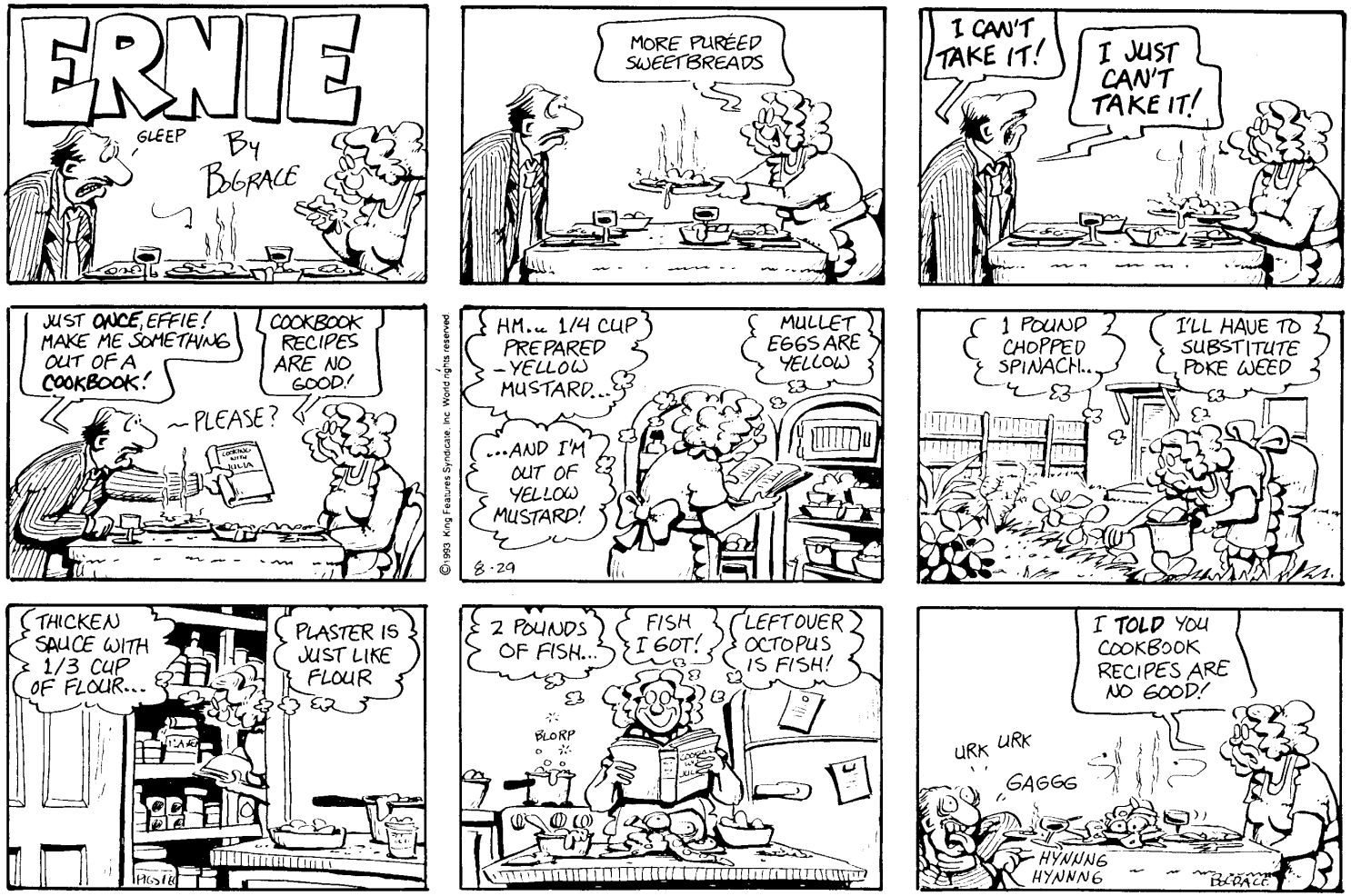
Appendix C: Activity Instructor Key

Culinary Skills to Reduce Fat and Saturated Fat

List two culinary skills that reduce fat and saturated fat.
Sample correct answers are listed below.

1. Bake, don't fry.
2. Identify the type of fat.
3. Reduce the total fat.
4. Switch to an unsaturated fat.
5. Steam, don't sauté.
6. Drain fat off of meats.
7. If you fry, use a high temperature.

T-1



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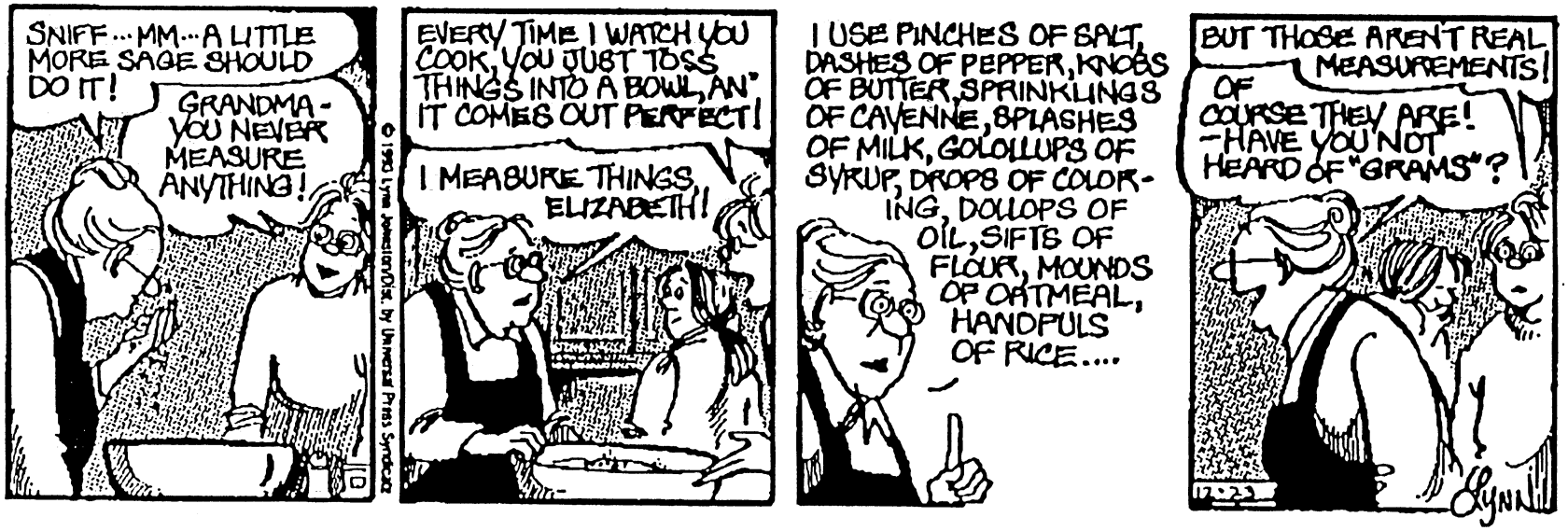
T-2

For Better or For Worse® **by Lynn Johnston**



Lesson 5: Standardized Recipes and Preparation Techniques

Competencies

Participants will be able to:

1. Identify the benefits to using standardized recipes in NuMenus and Food Based Menus.
2. Identify five culinary skills that increase nutrient retention.
3. Name two food preparation methods that reduce the fat and saturated fat content.